

# BARRIERS TO COLORECTAL CANCER SCREENING IN PEOPLE WITH DISABILITIES: A MINI REVIEW

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**ABSTRACT** People living with a disability represent one of the most marginalized populations, with substantial disparities observed in healthcare utilization. This extends to colorectal cancer screening, as people living with disability are significantly less likely to receive or attend cancer screening programs. Although it is proposed that people with disability share many of the same barriers to cancer screening as people without disabilities, the low utilization rate among people with disabilities suggests that there are additional barriers and challenges. Hence, this literature review aims to identify and discuss the barriers to colorectal cancer screening in people with disabilities, including physical and intellectual disabilities. We identified a range of barriers at individual and systemic levels that substantially impacted the participation in colorectal cancer screening by people with disabilities.

**KEYWORDS** Barriers to screening, colorectal screening and early detection, screening colonoscopy, colorectal cancer, disabilities

## Introduction

Colorectal cancer is described as the third most common diagnosis. It carries the second-highest mortality rate of any malignancy for both sexes combined. In recent years, the incidence of this malignancy and the collective mortality rate has steadily declined, most likely due to the increased screening facilities and improved therapeutics [1]. Colorectal cancer screening has vastly improved patient prognoses. In addition, its ability to detect cancer and precursor lesions has permitted early interventions, resulting in an evident decline in cases. Therefore, the current literature highlights the significant importance of receiving colorectal cancer screening among all populations [2,3].

People living with a disability represent one of the most marginalized populations, as the World Health Organization (WHO) describes, despite accounting for 15.6-19.4% of the global population. As a result, this population are often overlooked

and suffer from poor health, with statistics suggesting that people with disability are two-fold more likely to be denied access to healthcare compared to the general population [4]. This disparity extends to cancer screening, including colorectal cancer screening, with data from South Carolina Medicaid and Medicare State Health Plan. Hospital discharge data shows lower adherence rates to colorectal screening recommendations for individuals with intellectual disabilities and spinal cord injuries [5]. The adverse outcomes of this low utilization among people with disability have been exacerbated in recent years, with research describing that, since people with disabilities are now living longer, the pooled incidence of colorectal cancer in this population is increasing [6].

The prevalence of cancer screening among adults with disabilities in the United States suggests that there are more substantial barriers for this population when compared to others, with a 2017 study observing significant disparities in receipt of cancer screening among this population. Regarding colorectal cancer screening, the prevalence among persons without disabilities was 57.0%, compared with 48.6% among those with vision limitations [7]. These disparities were exclusively investigated in the participation rate of colorectal cancer screening in South Korea over ten years. The findings substantiated that substantial barriers exist to cancer screening amongst people with disabilities. In addition, this study found that, despite the availability of

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a National Cancer Screening Program, a significant disparity in colorectal cancer screening participation among people with severe disabilities or several specific types of disabilities was observed [8]. The current literature focuses on general barriers to colorectal cancer screening, including fear or worries about the procedure and its outcome and financial and logistical challenges [9]. Although it has been emphasized that people with disability share many of the same barriers to cancer screening as people without disabilities, the low utilization rate among people with disabilities suggests additional barriers exist [10]. However, few studies discuss barriers specific to people with disabilities and how these barriers vary between disability types. Hence, this literature review aims to identify and discuss the barriers to colorectal cancer screening in people with disabilities.

## Review

### Method

A search strategy was formulated and centered around the aim of this literature review. A PICO framework was devised to assist in identifying relevant literature for discussion. Table 1 presents an overview of this framework and the key terms devised for use in the search strategy. PubMed was systematically screened to discover relevant citations.

### Discussion

Several barriers to colorectal cancer screening in people with disabilities were identified in the current literature, spanning both intellectual and physical disabilities. The most commonly discussed challenges centred around fear and worries; however, these extend beyond the fears of the general population, as the feeling of distress and the risk of complications is often exacerbated in people with disabilities. Moreover, we observed that family caregivers and paid care workers substantially influenced the decision to refuse colorectal cancer screening in individuals with disabilities.

The consensus is that people with intellectual disabilities receive colorectal cancer screening at lower rates when compared to the general population. However, the rationale behind these statistics is largely underreported. Breau et al. investigated this paradigm and described family physicians' and trainees' experiences concerning cancer screening in this patient population in an interpretive description study. Several factors that influence the decision to recommend colorectal cancer screening were described. The interpersonal interaction between the patient and the physician is the primary consideration. In instances where the patient is not comfortable with their physician or their environment, several potential harms of screening may arise. These potential harms behave as a significant barrier to colorectal cancer screening in patients with intellectual disabilities and include distress on the part of the patient, coping with the screening procedures, and coping with a potential colorectal cancer diagnosis. However, the physicians interviewed in this study stated that they did not consider intellectual disability to be a sufficient rationale to withhold a cancer screening recommendation [11].

The wide array of geographic locations that report a low colorectal cancer screening utilization rate among people with a learning disability indicates that the challenges faced by this population are universal. Byrnes et al. report on the attitudes of this population, alongside that of family caregivers and paid care workers, towards national cancer screening programs in the

United Kingdom. The three primary barriers that prevented participants from attending a colorectal cancer screening program were fear, concerns over pain, and the potential influence of both family caregivers and paid care workers [12]. The influence of family caregivers and paid care workers was not prevalently identified as a barrier to colorectal cancer screening; however, it is comprehended that additional co-morbid psychopathology in patients with intellectual disabilities can significantly impact their caregivers' psychological well-being [13]. Hence, family caregivers and paid care workers may be more inclined to object and voice their concerns regarding colorectal cancer screening to limit the distress placed on patients with intellectual disabilities.

Several barriers have also been identified in patients with reduced literacy skills, including those with learning disabilities. As the current literature describes, patients with reduced literacy skills tend to avoid any written health information. This is a profound barrier in instances where patients are invited to colorectal cancer screening via written communication [14]. Furthermore, patients feel embarrassed if asked to attend a colorectal cancer screening, especially in cases where no one was available with whom the patient was comfortable talking. Systemic barriers were also highlighted as patients often feel they are not given sufficient opportunities to discuss the screening process [15,16].

This represents an area for improvement when addressing professional practice barriers. A qualitative study was conducted by Solenberg et al. that aimed to investigate the self-reported barriers to colorectal cancer screening in 30 people with spinal cord injuries and disorders. Several themes were identified following the semi-structured interviews, including socioeconomic, health system, transportation, psychological, and environmental or accessibility barriers. Beyond this, the participants also highlighted that colonoscopy preparation represents a substantial barrier to screening [17]. Merten et al. mirrored these findings and identified a few other barriers to colorectal cancer screening that merit discussion. In this scoping review, 35 studies focused on barriers to cancer screening, including colorectal cancer screening, in people with physical disabilities were rigorously assessed. It was evident that people with advanced disabilities were not screened for cancer as often as the general population, with challenges spanning cost, access, health care provider discomfort, and physical and cognitive restraints. The individual barriers identified included education, income, patient age, employment, screening history, tobacco use, activity level, disability level, and geography [18].

### Future directions

Identifying barriers to colorectal cancer screening in people with disabilities may only be beneficial if mechanisms are implemented to facilitate proactive measures to promote utilization. Several studies discussed practical mechanisms and facilitators, including supporting people with a learning disability to attend a screening, promoting awareness of screening in this population, and discussing psychophysical experiences. Beyond this, addressing professional practice barriers is crucial. To achieve this, it is proposed that physicians and other healthcare staff receive additional education on the needs of these patients while highlighting the need for multidisciplinary work [12]. Additional interventions were also described, including the provision of health care provider training to enhance patient-staff interactions, community interventions, shifting the focus to the value of health promotion and identifying the specific needs of each patient with a disability [18]. Collectively, these facilitators will

**Table 1** - PICO framework.

Population	People with disability, intellectual disability, physical disability
Exposure	Colorectal cancer screening, cancer screening programmes
Outcome	Barriers, challenges, perspectives, experiences, considerations

enable patients and their immediate care team to make an informed decision regarding colorectal cancer screening.

## Conclusions

The barriers to colorectal cancer screening in patients with disabilities are similar to that of non-disabled patients; however, the challenges tend to be exacerbated. This includes increased fear as this patient population is at an increased risk of complications and distress. It was also observed that family caregivers and paid care workers substantially influenced the decision to refuse colorectal cancer screening in individuals with disabilities. Several mechanisms have been proposed to facilitate an informed decision to be made regarding colorectal cancer screening, including increased staff education, enhanced patient-staff interactions, community interventions, and identifying the individual needs of each patient with a disability.

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## Conflict of interest

There are no conflicts of interest to declare by any of the authors of this study.

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